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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,967	08/13/2001	Gerd Reime	944-003.100	7763

4955 7590 04/26/2004

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EXAMINER

LUU, THANH X

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/928,967	REIME ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thanh X Luu	2878	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.  
2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 7-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 10,15 and 23 is/are allowed.  
6) ☒ Claim(s) 1,5,7-9,17-20,24 and 27 is/are rejected.  
7) ☒ Claim(s) 11-14,16,21,22,25,26 and 28-31 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is in response to amendments and remarks filed March 26, 2004. Claims 1, 5 and 7-31 are currently pending.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, "the inner area" lacks proper antecedent basis.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 5, 7-9, 17-20 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Holehan (U.S. Patent 6,337,918).

Regarding claims 1, 5, 7-9, 17-20 and 24, Holehan discloses (see Figure 2) a method and apparatus of sensing and detecting the presence of an object (A) at a touch pad device having more or more input functions, wherein the touch pad device has a

designated interaction area for allowing a user to use the object to interact with the touch pad device for facilitating the one or more input functions, comprising: providing at least one group of optical sensor components including a first light emitter (first instance of 20), a second light emitter (second instance of 20) and a light receiver (24) in the touch pad device at different locations such that the receiver is capable of receiving a first amount of light emitted by the first light emitter and reflected by the object (A) and a second amount of light emitted by the second light emitter and reflected by the object, wherein when the object is present at the touch pad device the object causing a change in the first and second amount of light; measuring separately (see column 4, line 60 - column 5, line 2) the change in the first amount of light and the change in the second amount of light for providing a first signal and a second signal indicative of the respective changes; and determining a location of the object (triangulation) in the designated interaction area in relation to the first light emitter and the second light emitter by comparing the change in the first amount of light and the change in the second amount of light based on the first and second signals. Holehan also discloses (see Figure 2) the area has an upper side and a lower side or a left and right side, wherein the sensor components are placed on the lower side or the left or right side. Since the position detection is in real-time, the measuring and determining steps are inherently carried out repeatedly. Holehan also discloses (see Figure 2) the touch pad device has a peripheral area (under) adjacent the interaction area, the group of optical sensor components are placed within the peripheral area. Holehan further discloses (see column 4 line 60 - column 5, line 2) operating the emitters in a pulsed mode of a

predetermined frequency, the changes in the amount of light inherently contains a frequency component of the predetermined frequency. Holehan also discloses (see Figure 3) infrared LEDs.

***Allowable Subject Matter***

5. Claims 10, 15 and 23 are allowed over the prior art of record.
6. Claims 11-14, 16, 21, 22, 25, 26 and 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments filed March 26, 2004 have been fully considered but they are not persuasive.

Applicant asserts that the prior art does not disclose the optical sensor components in the peripheral area. Examiner disagrees. As understood, the peripheral area of Holehan comprises at least the area underneath the glass 22. Since the area underneath the glass is "adjacent" to the inner area or interaction area (on the glass), the limitation of a peripheral area is met.

The other language added to the claims has no patentable weight since it only appears in the preamble, is drawn to intended use and adds no structural limitation to the claims.

Thus, as set forth above, this rejection is proper.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X Luu whose telephone number is (571) 272-2441. The examiner can normally be reached on M-F (6:30-4:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thanh X Luu', with a stylized flourish at the end.

Thanh X Luu  
Primary Examiner  
Art Unit 2878

04/04